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10/788,954	03/01/2004	Shiping Wang	GL-6115DIV	6669

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EXAMINER
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AUGHENBAUGH, WALTER

ART UNIT	PAPER NUMBER
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1772

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 10/788,954	<b>Applicant(s)</b> WANG ET AL.	
	<b>Examiner</b> Walter B. Aughenbaugh	<b>Art Unit</b> 1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133): Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 July 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-20 and 22-24 is/are pending in the application.
- 4a) Of the above claim(s) 19 and 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-18 and 22-24 is/are rejected.
- 7) ☒ Claim(s) 18 and 23 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>7/06/04</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Acknowledgement of Applicant's Amendments***

1. The amendments made in claim 10 in the Amendment filed July 27, 2006 (Amdt. A) have been received and considered by Examiner.
2. Claims 19 and 20 are incorrectly labeled in Amdt. A. Claims 19 and 20 should be labeled as "(withdrawn)" in Amdt. A since they are nonelected.

### ***Specification***

3. The abstract of the disclosure is objected to because phrases which can be implied (such as those in lines 1, 2 and 9) should be avoided, the first nine lines of the abstract are directed to a process, but an article, not a process, is the invention, and legal phraseology such as "comprises" (lines 5 and 7) and "comprising" (line 5) should be avoided.

Correction is required. See MPEP § 608.01(b).

### ***Election/Restrictions***

4. Applicant's election with traverse of Group I, claims 10-18 and 22-24 in the reply filed on July 27, 2006 (Amdt. A) is acknowledged. The traversal is on the ground(s) that Applicant's amendments in claim 10 in Amdt. A. This is not found persuasive because the combination as claimed does not require the particulars of the subcombination as claimed for patentability for at least one other reason besides the reason provided in the Restriction Requirement as follows:

Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant

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case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination as claimed does not require that the latex composition is a polyisoprene latex composition. The subcombination has separate utility such as the material of an article having a tensile of less than about 3000 psi.

5. The examiner has required restriction between combination and subcombination inventions. Where applicant elects a subcombination, and claims thereto are subsequently found allowable, any claim(s) depending from or otherwise requiring all the limitations of the allowable subcombination will be examined for patentability in accordance with 37 CFR 1.104. See MPEP § 821.04(a). Applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application.

#### ***Claim Objections***

6. Claims 18 and 23 are objected to because of the following informalities: in regard to claim 18, Applicant refers to a ratio involving three compounds, but an actual ratio involving three compounds is not recited in claim 18. In regard to claim 23, claim 23 recites a "polyisoprene latex composition", but claim 10 recites a "latex composition", not a "polyisoprene latex composition".

Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claims 10, 16, 17, 23 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In regard to claim 10, the appearance of "and a stabilizer" twice (in lines 4-5 and in line 6) renders the claim indefinite since it cannot be ascertained whether or not Applicant intends to recite two separate stabilizers.

In regard to claims 16 and 17, since it cannot be ascertained whether or not Applicant intends to recite two separate stabilizers in claim 10, it cannot be ascertained whether or not Applicant intends to refer to two separate stabilizers in claims 16 and 17, or if Applicant intends to refer to one stabilizer (and if Applicant intends to recite two separate stabilizers in claim 10, it cannot be ascertained which stabilizer Applicant intends to refer to in each of claims 16 and 17).

In further regard to claims 16 and 17, and in regard to claim 23, the recitations of these claims cannot be treated on their merits since it cannot be ascertained whether or not Applicant intends to recite that the milk protein salt of claim 16 and the sodium caseinate of claims 17 and 23 are actually present in the final product in the claimed form of milk protein salt (in regard to claim 16) and of sodium caseinate (in regard to claims 17 and 23). Furthermore, the language of the claims does not require that the milk protein salt of claim 16 and the sodium caseinate of claims 17 and 23 are actually present in the final product.

Claims 23 and 24 recite the limitation "The glove" in the first line of the claims. There is insufficient antecedent basis for this limitation in the claims.

***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 10, 16-18, 23 and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by McKay et al. (USPN 5,869,591).

In regard to claim 10, McKay et al. teach a synthetic elastomeric polyisoprene article (col. 1, lines 18-20 and col. 21, lines 39-44 and 51-54) having a tensile strength of 3200 psi (col. 31, line 13) as measured in accordance with ASTM D412 (col. 29, lines 1-6), a value that is greater than 3000 psi. McKay et al. teach that the article is prepared with a curing agent that comprises a dithiocarbamate compound, a thiazole compound and a guanidine compound (col. 13, lines 21-30) and that the elastomer of the article comprises a stabilizer (col. 12, lines 45-51).

Claims 16, 17 and 23 cannot be treated on their merits due to the indefiniteness of these claims. See 35 U.S.C. 112, second paragraph rejection of claims 16, 17 and 23 made of record in this Office Action.

In regard to claim 18, McKay et al. teach that the curing system that comprises a dithiocarbamate compound, a thiazole compound and a guanidine compound is provided in an amount of from 0.5 to 12 weight percent (col. 13, lines 21-30), an amount that overlaps with the amounts claimed in claim 18 for each of the compounds relative to the amount of polyisoprene.

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In regard to claim 24, the recitation "is stored for up to about 7 days" is a method limitation that has not been given patentable weight since the method of forming the article is not germane to the issue of patentability of the article itself.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 11-14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKay et al. (USPN 5,869,591) in view of Ozawa et al. (USPN 6,187,857).

In regard to claims 11 and 22, McKay et al. teach the article as discussed above.

McKay et al. fail to explicitly teach that the article is a glove.

Ozawa et al., however, disclose that elastomeric polyisoprene gloves are prepared from a polyisoprene latex composition comprising a dithiocarbamate compound and a thiazole compound (col. 3, lines 1-8, col. 6, lines 50-56 and col. 9, lines 7-14), and that guanidine is another type of accelerator that can be used to prepare elastomeric polyisoprene articles (col. 2,

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lines 8-13). Therefore, one of ordinary skill in the art would have recognized to have used the composition of McKay et al. that includes a curing agent that comprises a dithiocarbamate compound, a thiazole compound and a guanidine compound to form a glove since it is well known to prepare gloves from polyisoprene latex compositions as taught by Ozawa et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the composition of McKay et al. that includes a curing agent that comprises a dithiocarbamate compound, a thiazole compound and a guanidine compound to form a glove since it is well known to prepare gloves from polyisoprene latex compositions as taught by Ozawa et al.

In regard to claims 12 and 13, McKay et al. teach the article as discussed above.

McKay et al. fail to explicitly teach that the article is a condom or a probe cover.

Ozawa et al., however, disclose that elastomeric polyisoprene balloons are prepared from a polyisoprene latex composition comprising a dithiocarbamate compound and a thiazole compound (col. 3, lines 1-8, col. 6, lines 50-56 and col. 9, lines 7-14), and that guanidine is another type of accelerator that can be used to prepare elastomeric polyisoprene articles (col. 2, lines 8-13). Therefore, one of ordinary skill in the art would have recognized to have used the composition of McKay et al. that includes a curing agent that comprises a dithiocarbamate compound, a thiazole compound and a guanidine compound to form a balloon since it is well known to prepare balloons from polyisoprene latex compositions as taught by Ozawa et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the composition of McKay et al. that includes a curing agent that comprises a dithiocarbamate compound, a thiazole compound and a guanidine compound to



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form a balloon since it is well known to prepare balloons from polyisoprene latex compositions as taught by Ozawa et al.

In further regard to claims 12 and 13, a condom and a probe cover fall within the scope of the teaching of Ozawa et al. of balloons since balloons can be used as condoms and as probe covers. The recitations “condom” and “probe cover” are intended use phrases that have been given little patentable weight, since it has been held that a recitation with respect to the manner in which a claimed article is intended to be employed does not differentiate the claimed article from a prior art article satisfying the claimed structural limitations. *Ex parte Masham*, 2 USPQd 1647 (1987).

In regard to claim 14, McKay et al. teach the article as discussed above.

McKay et al. fail to explicitly teach that the article is a catheter.

Ozawa et al., however, disclose that elastomeric polyisoprene catheters are prepared from a polyisoprene latex composition comprising a dithiocarbamate compound and a thiazole compound (col. 3, lines 1-8, col. 6, lines 50-56 and col. 9, lines 7-13), and that guanidine is another type of accelerator that can be used to prepare elastomeric polyisoprene articles (col. 2, lines 8-13). Therefore, one of ordinary skill in the art would have recognized to have used the composition of McKay et al. that includes a curing agent that comprises a dithiocarbamate compound, a thiazole compound and a guanidine compound to form a catheter since it is well known to prepare catheters from polyisoprene latex compositions as taught by Ozawa et al.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the composition of McKay et al. that includes a curing agent that comprises a dithiocarbamate compound, a thiazole compound and a guanidine compound to

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form a catheter since it is well known to prepare catheters from polyisoprene latex compositions as taught by Ozawa et al.

13. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over McKay et al. (USPN 5,869,591) in view of Ozawa et al. (USPN 6,187,857) and in further view of Pollack (USPN 3,732,578).

McKay et al. teach the elastomeric polyisoprene article as discussed above in regard to claim 10. McKay et al. teach that diphenyl guanidine is a suitable guanidine (col. 15, lines 7-8). McKay et al. teach that suitable curing agents are substituted dithiocarbamates (col. 13, lines 24-27).

McKay et al. fail to teach that the substituted dithiocarbamate is zinc diethyldithiocarbamate and that the thiazole is zinc 2-mercaptobenzothiazole.

Ozawa et al., however, disclose that zinc 2-mercaptobenzothiazole is a suitable accelerator for preparing elastomeric polyisoprene articles (col. 2, lines 8-13 and col. 7, lines 35-38).

Pollack, furthermore, discloses that zinc diethyldithiocarbamate is a suitable accelerator for preparing elastomeric polyisoprene articles (col. 3, lines 42-49 and col. 4, lines 49-53).

Therefore, one of ordinary skill in the art would have recognized to have used zinc 2-mercaptobenzothiazole as the thiazole of the article of McKay et al. and to have used zinc diethyldithiocarbamate as the dithiocarbamate of the article of McKay et al. since zinc 2-mercaptobenzothiazole and zinc diethyldithiocarbamate are suitable accelerators for preparing elastomeric polyisoprene articles as taught by Ozawa et al. and Pollack, respectively.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used zinc 2-mercaptobenzothiazole as the thiazole of the article of McKay et al. and to have used zinc diethyldithiocarbamate as the dithiocarbamate of the article of McKay et al. since zinc 2-mercaptobenzothiazole and zinc diethyldithiocarbamate are suitable accelerators for preparing elastomeric polyisoprene articles as taught by Ozawa et al. and Pollack, respectively.


*Conclusion*

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter B. Aughenbaugh whose telephone number is 571-272-1488. While the examiner sets his work schedule under the Increased Flexitime Policy, he can normally be reached on Monday-Friday from 8:45am to 5:15pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on 571-272-1498. The fax phone number for the organization where this application or proceeding is assigned is to 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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